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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,265	01/27/2000	Yi-Hsien Hao	34556/JFO/B600	9668
32294	7590	07/10/2006	EXAMINER	
SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			PHILPOTT, JUSTIN M	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 09/492,265	Applicant(s) HAO ET AL.	
	Examiner Justin M. Philpott	Art Unit 2616	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 27 June 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because:
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
- NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: _____.
- Claim(s) objected to: _____.
- Claim(s) rejected: _____.
- Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☐ Other: _____.


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SUPERVISORY PATENT EXAMINER 7/6/06

Continuation of 11. does NOT place the application in condition for allowance because:

Applicant's arguments filed June 27, 2006 have been fully considered but they are not persuasive. Specifically, applicant reasserts the arguments presented in the Response filed February 7, 2006 that Black does not recite a "predefined portion" of the destination address is used as a key and that motivation to combine the cited art is not provided. This argument was addressed by the Examiner in the Final Office action mailed April 27, 2006. In response, Examiner maintains the position recited in this Final Office action for the following reasons.

First, Black clearly provides the general teaching of using a destination address as a key (e.g., see col. 8, lines 54-58, and the remainder of the Black patent with similar phrasing of "using the destination address ... as a search key"), which is admitted by applicant (Remarks, February 7, 2006, at page 8, lines 3-5). However, Examiner agrees with applicant in that Black does not specifically disclose how much of the destination address is "used" - i.e., whether it is the entire destination address that is used, or whether only a predefined portion is necessary to provide the same result. Rather, Black may appear to leave it up to the well known art to fill in these, arguably minor, details. Even without reference by Black to a "predefined portion", however, Black does not limit the teachings of the invention to require the entire destination address is used. That is, applicant's presumption that Black must use the entire address "at least because Black does not disclose or suggest using only a predefined portion" (Remarks, February 7, 2006, at page 8, lines 3-5) is misplaced. Nowhere does Black state requiring an "entire" destination to be used as the key. Rather, Black merely teaches "using the destination address" as a key (col. 8, lines 54-55). Accordingly, applicant's claim limitation of "the key is a predefined portion of a packet destination address" is at least obvious in view of Black since: 1) either a portion or an entire destination address are inherently performed in the invention of Black in order to be "using the destination address", 2) both are obvious design choices to implement "using" the destination address taught by Black, and 3) neither option is taught away by Black. Accordingly, at the time of the invention it would have been obvious to one of ordinary skill in the art to utilize the entire address when system resources are available for using the entire address, and at the time of the invention it would have been obvious to one of ordinary skill in the art to utilize a predefined portion of the address when system resources are more limited. For this reason applicant's argument is not persuasive.

Furthermore, in addition to there being only two ways to implement the teachings of Black -- i.e., wherein either the key is a portion of the destination address or the key is the entire address -- it should be noted that Black recognizes an advantage for using less addressing communications to conserve hardware resources (e.g., see col. 8, lines 10-32 regarding smaller lookup tables). Accordingly, without given direction by Black as to how much of the destination address to use as a key, one of ordinary skill in the art would find this teaching by Black to be an encouragement, or at the very least a suggestion, to use a portion (or, as applicant recites, a "predefined portion" of the destination address) rather than the entire destination address as the key, when feasible, in order to conserve hardware resources. Furthermore, one of ordinary skill in the art would readily recognize the advantage of using only the amount of the destination address that is necessary to provide proper functioning as a key, in order to conserve a variety of system resources known in the art (e.g., such as processing power, memory for storing either full or portions of addresses, bandwidth required for each portion of the addresses communicated within the system, etc.). For this additional reason applicant's argument is not persuasive.

Still further, the language of Black, "using the destination address ... as a search key to search a routing table" (col. 8, lines 54-55), clearly states using the search key to search a routing table, and does not state using the destination address to search a routing table. If the search key in Black comprises the entire destination address (as applicant has proposed), there would be no need or purpose for Black to recite having a specific "search key". In such a case proposed by applicant (where the entire destination address would be used), the destination address would be the search key, and vice versa. Because Black specifically teaches using "a search key" to search the routing table, instead of using the destination address to search the routing table, Black indicates the destination address and the search key are two distinct elements. Accordingly, in order to give meaning to the term "a search key" in Black, the key in Black would more appropriately be understood to be a "portion" of the destination address as opposed to the "entire" address. For this additional reason applicant's argument that Black implies using the entire destination address as the key and not a portion of the destination address as the key is not persuasive, since Black implies the opposite by disclosing use of a search key to search the routing table. In summary, applicant implicitly argues that it cannot be obvious to one of ordinary skill in the art to use a "predefined portion" of a destination address as a key when prior art specifically discloses using a "destination address ... as a key" (Black, at col. 8, lines 54-56) without requiring that only a "predefined" portion of that address is to be used. However, if not directly taught by Black, and if not reasonably implied by Black through teachings of efficiency (e.g., see Black, col. 8, lines 10-32) or through teaching a search key that is distinct from the destination address (e.g., see col. 8, lines 54-55), using a predefined portion of the destination address in Black instead of using the entire destination address would have been obvious to one of ordinary skill in the art at the time of the invention in order to conserve a variety of system resources known in the art (e.g., such as processing power, memory for storing either full or portions of addresses, bandwidth required for each portion of the addresses communicated within the system, etc.). Accordingly, applicant's argument is not persuasive for all of the reasons discussed above.

Finally, applicant argues (page 9) that Examiner has not provided any motivation for combining the teachings of Black with that of Muller, Steiner and Fenner. However, contrary to applicant's assertion, motivation was provided in the previous office (see Office Action, January 11, 2006, at page 6, lines 13-15 and 18-20) and is repeated herein. Specifically, motivation for applying the teachings of Black to that of Muller, Steiner and Fenner lie in the fact that Black, like Fenner, also teaches a memory structure utilizing a key (e.g., see col. 8, line 54 - col. 9, line 3; col. 25, lines 40-64; and col. 31, line 43 - col. 32, line 9), but the additional teachings of Black provide the added benefits of a memory structure with increased bandwidth without high cost and with faster connectivity (e.g., see Black at col. 5, line 19 - col. 11, line 6). Thus, as discussed in the previous office action, and repeated herein, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the key-based memory structure teachings of Black to the key-based memory structure of Muller in view of Steiner in view of Fenner in order to provide a memory structure with increased bandwidth without high cost and with faster connectivity (e.g., see Black at col. 5, line 19 - col. 11, line 6).